

SIPR-3252-4.0

Shin-Etsu Posi-type Photoresist

Process Conditions

Substrate : Bare Si wafer, HMDS primed

Thickness: 4.0 μm

Prebake: 100 °C $\times$ 120 sec

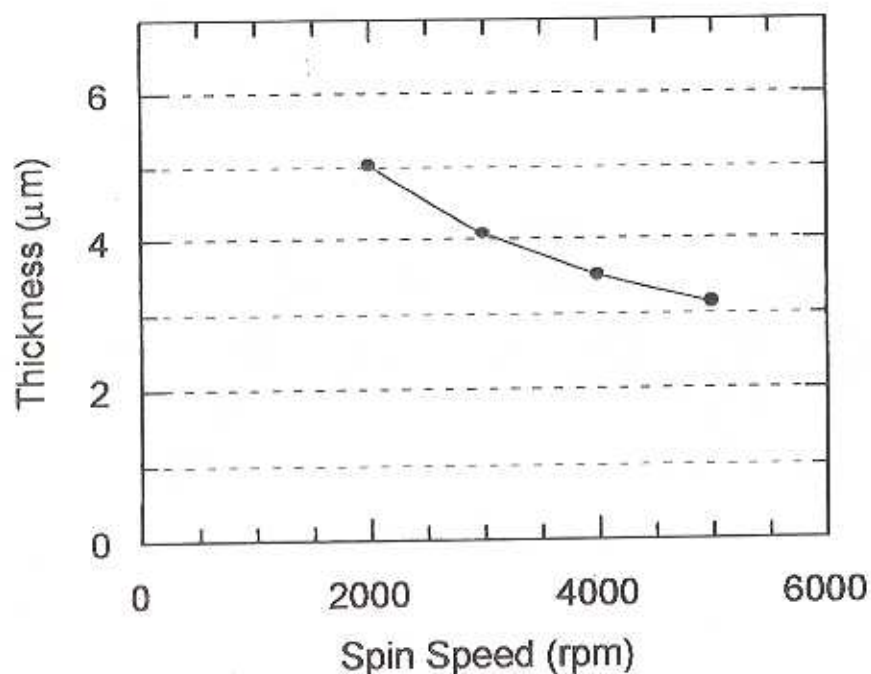
Exposure: NSR-1755i7A (NA = 0.50)

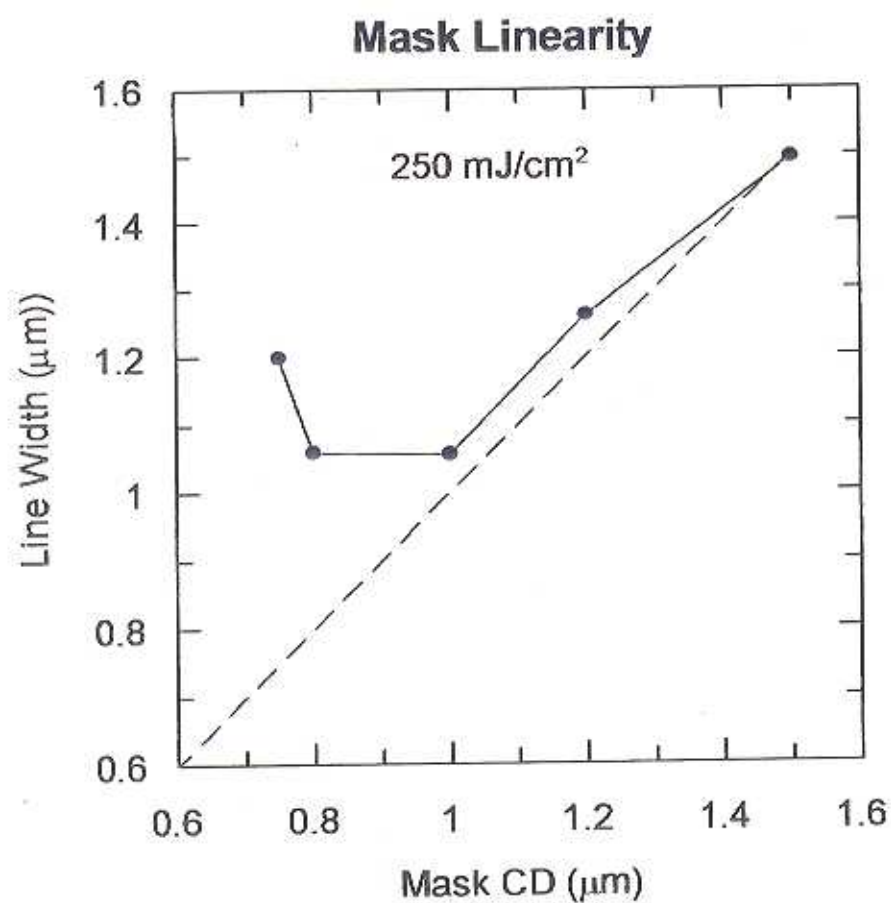
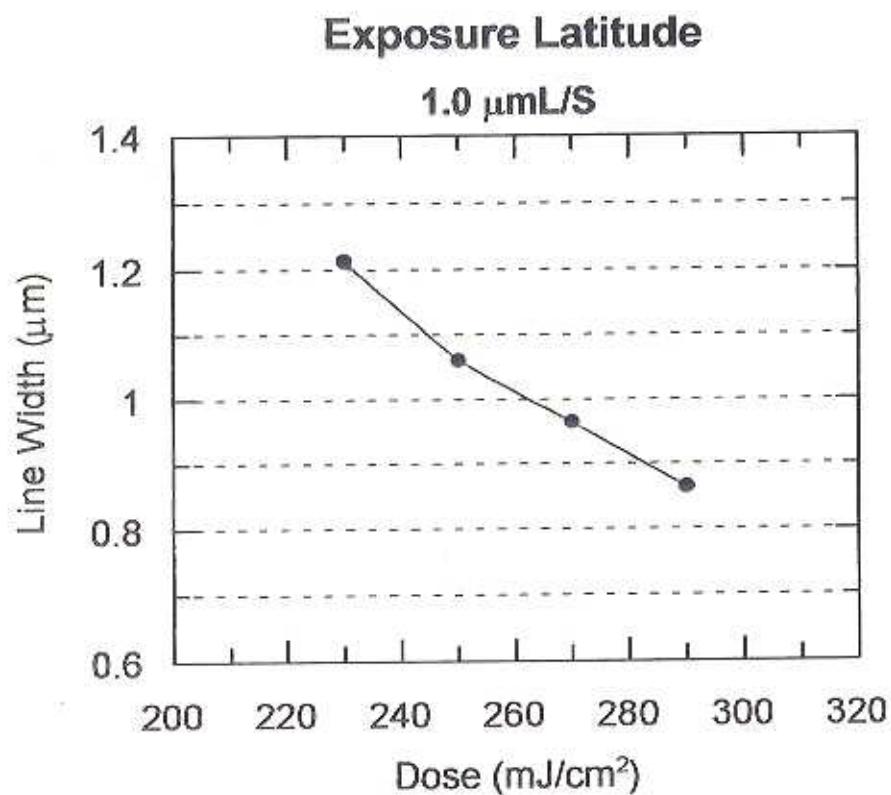
PEB: 110 °C $\times$ 90 sec

Development: SSFD-238 (TMAH = 2.38%)

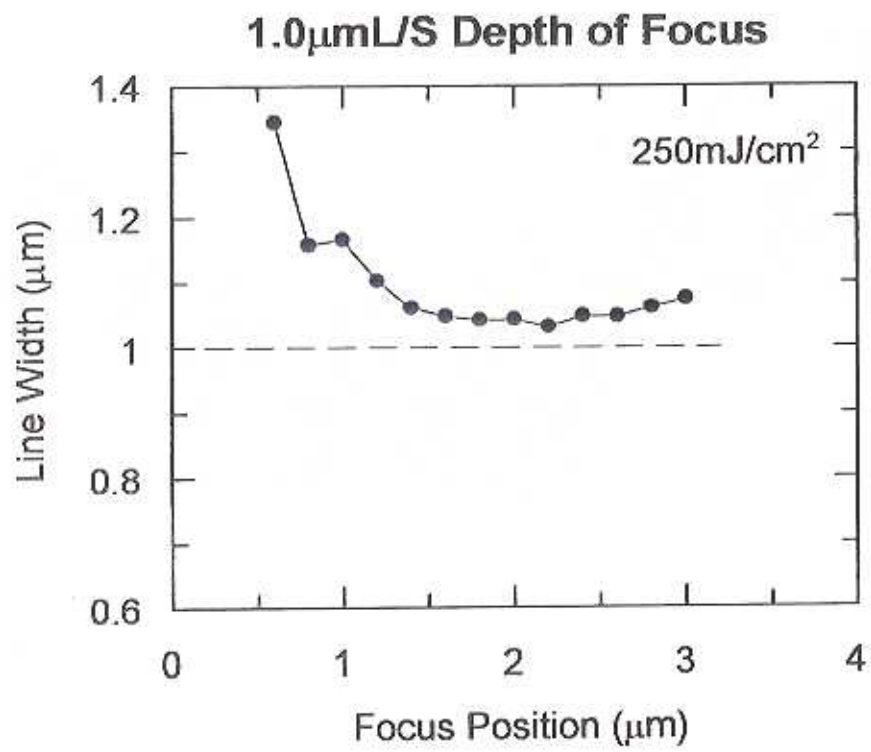
50 sec $\times$ 2 puddles

Thickness vs Spin Speed





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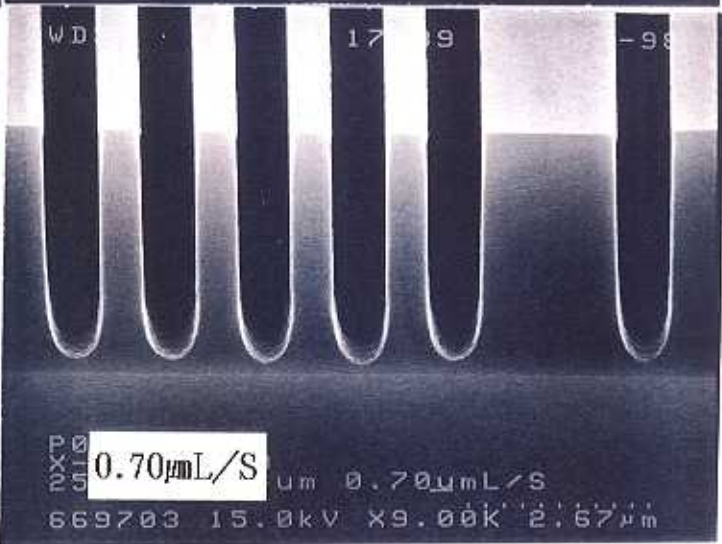
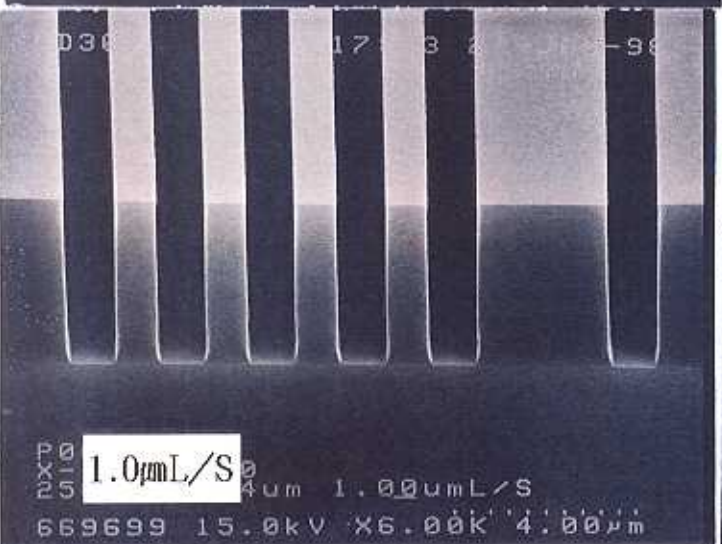
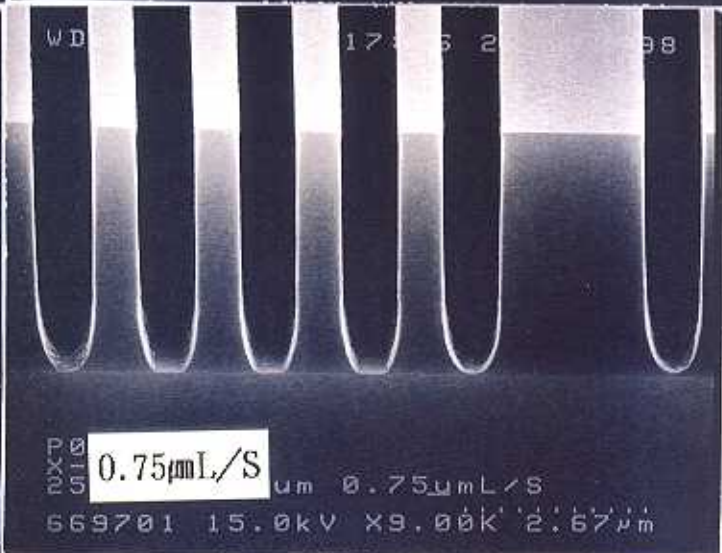
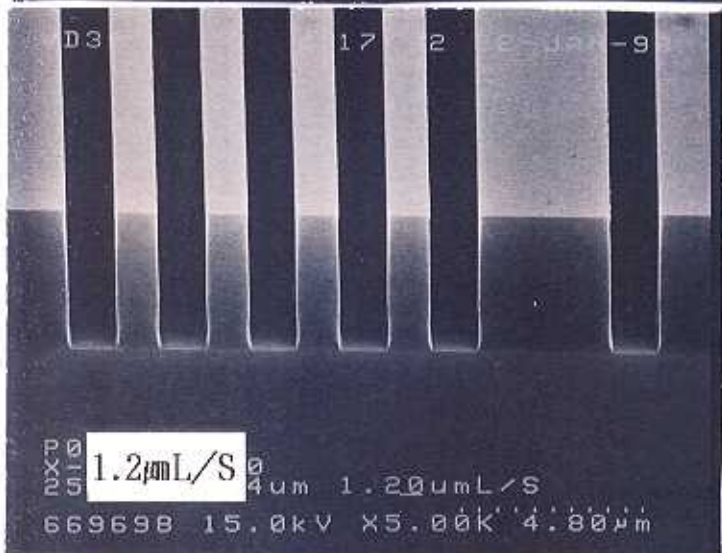
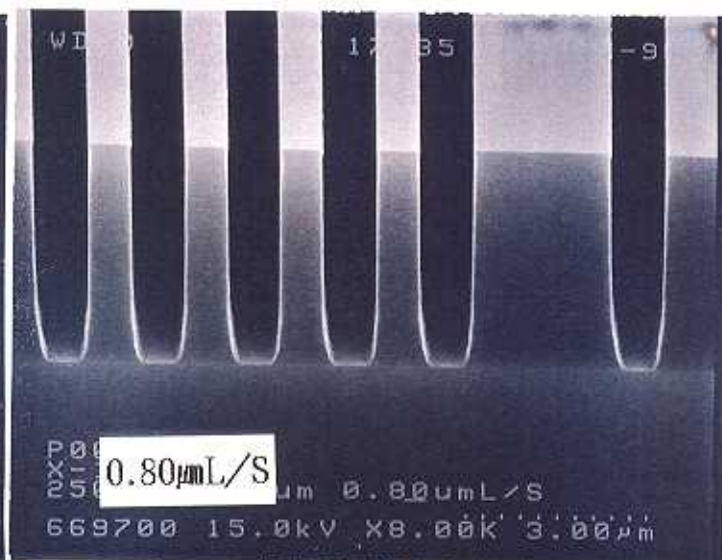
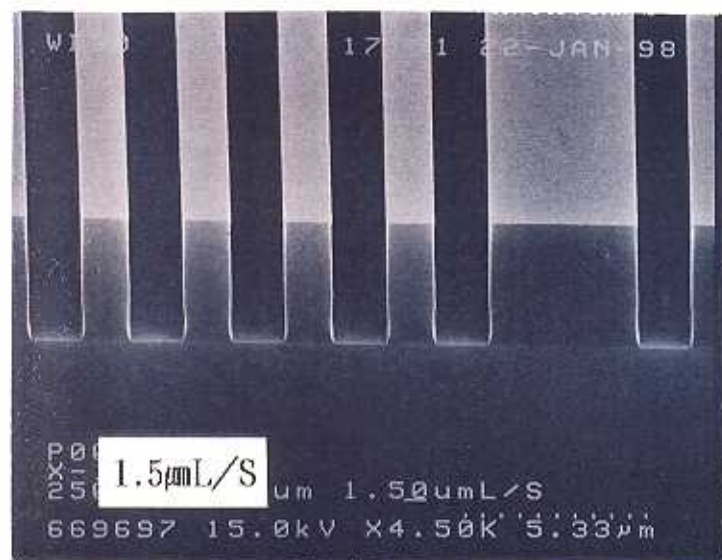


Mask Linearity

Substrate : Bare Si wafer, HMDS primed

Thickness: **4.0 μm** Prebake: 100 °C $\times$ 120 secExposure: NSR-1755i7A (NA = 0.50); **250 mJ/cm²**PEB: 110 °C $\times$ 90 sec

Development: SSFD-238 (TMAH = 2.38%)

50 sec $\times$ 2 puddles

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1.0 μm L/S Depth of Focus

Substrate: Bare Si wafer, HMDS primed

Thickness: 4.0 μm

Prebake: 100 °C $\times$ 120 sec

Exposure: NSR-1755i7A (NA = 0.50)

250 mJ/cm²

PEB: 110 °C $\times$ 90 sec

Development: SSFD-238 (TMAH = 2.38%)

50 sec $\times$ 2 puddles

